REMARKS

Applicant expresses appreciation to the Examiner for consideration of the subject patent application. This amendment is in response to the Office Action mailed May 16, 2005 wherein claims 1-16 were rejected. The claims have been amended and the following remarks have been prepared to address the concerns raised by the Examiner.

Claims 1-16 remain in this application. Claims 1, 4, 9 and 12 have been amended without narrowing the scope of the claims in order to clarify that which Applicants consider to be the invention. Applicants submit that the remaining claims are in condition for allowance and respectfully requests further examination of pending claims 1-16.

Claim Rejections - 35 U.S.C. § 103

Claims 1-16, including independent claims 1, 4, 9, and 12, were rejected under 35 U.S.C. § 103(a) as being obvious over a combination of U.S. Pat. No. 6,643,795 ("Sicola") and U.S. Pat. No. 6,542,954 ("Aruga").

All of the independent claims have been amended to recite that the switching system or switch is coupled to the data storage system I/O controller via the first data and control/management interface of the network adapter, and that the port circuitry is connected to the same data storage system I/O controller via the second data and control/management interface of the network adapter. For example, the claimed invention allows data to be sent from a host computer into a network card, through a switching system, and out to multiple data storage

systems without having to go back through the switching network or using bandwidth on regular host/network communication paths.

Neither Sicola nor Aruga discloses or suggests the claimed invention.

Sicola teaches a data mirroring system having a redundant configuration. The system includes dual Fiber Channel fabric links that connect two data storage sites, wherein each site has a host computer and associated data storage array, with redundant controllers and adapters (see abstract). The architecture of this system requires data to travel back and forth through the switched fabric and corresponding controllers thereby requiring excess processing steps.

For example, a typical write command in Sicola sends information from the host, to the host controller via the switched fabric, and the host controller then sends the information to the proximate storage device. In order to store this information to the remote site the host controller then sends the information back through the switching system to another host controller, which then sends the data to the remote storage device (see column 12 lines 11-38, note: similar steps are taken throughout the asynchronous operation, only delayed after being stored to cache). This process would require more processing resources and bandwidth because the data must travel through the entire system twice.

Accordingly, Sicola lacks a network adapter that not only couples a data storage system I/O controller to a switching system or switch via a first data and control/management interface, but also connects the same controller to port circuitry via a second data and control management interface, as required by the claims.

Aruga does not provide what is missing in Sicola. Examiner argues that Aruga specifies two sets of control/management interfaces and allows direct connection to disk drive units

pointing to column 4 line 29. This particular section refers to the ability to connect a controller to a storage device directly without using proprietary Fibre Channel fabric switches enabling different protocol options. However, Aruga's system does not provide a network adapter that not only couples a data storage system I/O controller to a switching system or switch via a first data and control/management interface, but also connects the same controller to port circuitry via a second data and control management interface, as required by the claims. In fact, the point of Aruga is to enable "one-to-one" connectivity between controllers and disk drive units (see abstract).

Applicant respectfully submits that the cited combination does not teach, suggest, or otherwise motivate someone with ordinary skill in the art to create the present invention as recited in Applicant's independent claims 1, 4, 9 and 12. Applicant further submits that all claims stand ready for allowance.

Applicant respectfully submits that dependent claims 2, 3, 5-8, 10, 11 and 13-16, being respectively dependent on independent claims 1, 4, 9 and 12, are allowable for the same reasons.

CONCLUSION

In view of the foregoing, the applicants' believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-7074.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

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